

TABLE OF CONTENTS

COVER PAGE	i
APPROVAL PAGE	ii
PLAGIARISM FREE STATEMENT	iii
PREFACE.....	iv
TABLE OF CONTENTS.....	v
LIST OF FIGURES	vii
LIST OF TABLES	ix
LIST OF APPENDICES	x
ABSTRACT	xi
CHAPTER I INTRODUCTION.....	1
1.1. Research Background.....	1
1.2. Research Problem.....	3
1.3. Research Scope.....	4
1.4. Research Objective.....	4
1.5. Research Advantage	4
1.6. Research Stages	4
1.7. Writing System.....	5
CHAPTER II LITERATURE REVIEW	7
CHAPTER III THEORITICAL BASIS	12
3.1. Wireless Network	12
3.2. Mobile Ad-Hoc Network (MANET).....	13
3.3. Ad-Hoc On-Demand Distance Vector (AODV) Routing Protocol.....	16
3.4. Destination-Sequenced Distance Vector (DSDV) Routing Protocol	22
3.4.1. Routing Tables.....	22
3.4.2. DSDV Packet Process Algorithm.....	23
3.5. Blackhole Attack	13
CHAPTER IV ANALYSIS AND SYSTEM DESIGN	26
4.1. Requirement Analysis	26
4.2. Simulation Parameters.....	27
4.3. Simulation Media	28
4.4. Blackhole Attack	28

4.5. MANET Simulation	29
4.6. Research Scenario	29
4.7. Data Comparison	32
CHAPTER V IMPLEMENTATION	34
5.1. System Specification	34
5.1.1. Hardware.....	34
5.1.2. Software	34
5.2. MANET Simulation Program Setup	35
5.2.1 Source Code Breakdown and Explanation	35
5.3. MANET Simulation	44
CHAPTER VI RESULT AND DISCUSSION	48
6.1. Throughput	48
6.1.1. AODV Simulation Throughput Data	48
6.1.2. DSDV Simulation Throughput Data	50
6.2. Number of Received Packet per Second	53
6.2.1. AODV Simulation Number of Received Packet Data	53
6.2.2. DSDV Simulation Number of Received Packet Data	56
6.3. Delay Time	59
6.3.1. AODV Simulation Delay Time Data	59
6.3.2. DSDV Simulation Delay Time Data	61
6.4. Number of Lost Packets per Flow	63
6.4.1. AODV Simulation Number of Lost Packet Data	63
6.4.2. DSDV Simulation Number of Lost Packet Data.....	65
CHAPTER VII CONCLUSION AND SUGGESTION	71
7.1. Conclusion.....	71
7.2 Suggestion	71
REFERENCES.....	72
APPENDICES	74